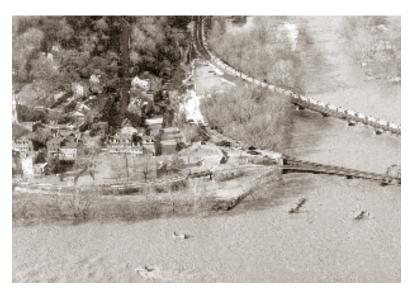
The Flood of 1996

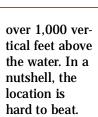
Opportunities for Interpretation and Training

Flooding along Shenandoah Street in Harpers Ferry Lower Town on January 20,1996. Photo by the author.

n my 19 months at Harpers Ferry National Historical Park, I have come to believe that it is among the most favorably located of all national parks. Harpers Ferry NHP is a delight for both the historian and the interpreter with over 200 years of post-contact history featuring dramatic events like John Brown's raid and including such noteworthy individuals as George Washington, Thomas Jefferson, Meriwether Lewis, Abraham Lincoln, Frederick Douglass, and W.E.B. Du Bois. From an administrative standpoint, the park's location also has many advantages. For example, it is close enough to Washington, DC to take advantage of the expertise found in the National Capital Area SSO and also in the Washington Office. At the same time, the 65 miles between the park and Washington, DC provides a welcome respite from some of the trials of living and working in a major metropolitan area that also happens to be the nation's seat of government. The park receives additional benefits from its proximity to the talent found in other neighboring NPS offices: Harpers Ferry Center, Mather Training Center, and the Appalachian Trail office. Last but not least is the scenery found at the junction of the Shenandoah and Potomac rivers with mountain peaks rising

Aerial view of flooding in Harpers Ferry Lower Town on January 20, 1996. Photographer unknown.





Yet this idyllic location is not without peril. The scenic and tranquil rivers that do so much to define the character of Harpers Ferry also have a tendency to flood on occasion. In fact, the rivers overflow their banks with a remarkable degree of regularity. Going back only as far as the mid-19th century, major flood events have occurred on over a dozen occasions. Aside from a few lengthy gaps, floods have inundated Harpers Ferry roughly every 10 years or so. With over a decade having passed since the last flood in 1985, Harpers Ferry was due for another at any time.

A combination of naivete and optimism led me to believe that no flood would occur during my time of employment in Harpers Ferry. Why not be optimistic? Over three decades passed between the 1889 and 1924 floods. Perhaps the park would experience this kind of lucky dry spell once again. Such was not to be the case.

On January 18, 1996, unseasonably warm weather caused the rapid melting of snow remaining from the Blizzard of 1996 which had paralyzed the East Coast a few weeks earlier. In this single 24-hour period, roughly 2' of snow melted down to the bare earth. Despite this swift loss of snow cover, there did not seem to be an immediate cause for alarm. The river forecast on January 19 called for the water to crest at 21.6'. This would leave the peak river height safely below the 23.6' level necessary to send water into park buildings. As a precautionary measure, the park staff received notification that we had been placed on flood stand-by and that we could be called in to work if the water exceeded the predicted crest.

At 12:30 a.m. on January 20, a ringing telephone jolted me out of bed. The river had reached the predicted crest 12 hours earlier than anticipated and the water was still rising. The dreaded moment had arrived: it was time to begin calling park staff into work to evacuate exhibits and

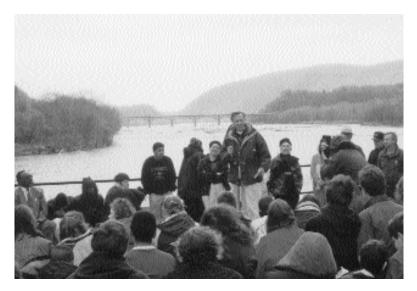
1/A CDM NO.5 1000

buildings in the flood plain. Thus began the most surreal experience of my 10 years in the National Park Service.

A flurry of activity took place that night as staff from the park, Harpers Ferry Center, and the Harpers Ferry Historical Association, along with WASO personnel duty-stationed in Harpers Ferry, joined together to form a small army of about 100 people intent on outracing the rising flood waters. Approximately 26 historic buildings owned by the park are within the flood plain. At least 10 major museum exhibits are housed within those buildings. Armed with a flood plan and knowledge of the order in which water would enter the buildings, we began the difficult evacuation process.

By the following morning, we were driving pickup trucks through hubcap-deep water to load them with museum exhibitry. Despite the onset of exhaustion and frayed nerves, we accomplished our task. Dealing primarily with exhibits that had been designed to disassemble easily in the event of a flood, we managed to evacuate all park buildings before rising water entered them. Although our exhibit displays and objects were secure, the water would not be denied entry. The river ultimately crested at 29.4' and reached a depth of almost 6' in certain park buildings. As might be

Secretary of the Interior Bruce Babbitt visits Harpers Ferry NHP on April 17, 1996.



expected, buildings suffered severe structural damage. The final repair figure for Harpers Ferry NHP was placed at \$3.2 million.

Once the water receded, the real work began. Buildings and streets had to be shoveled clear of mud, debris had to be removed, dangling tree limbs were pruned, and buildings had to be disinfected and sanitized. This task required a mammoth contribution on the part of park staff and numerous volunteer groups. Within a week, the park was reopened to the public on a limited basis. Much had been accomplished, but the lean

budgetary times provided no assurance that the park would receive the millions of dollars needed to address the significant structural damage to numerous park buildings.

In terms of securing the funding necessary to return the park to its pre-flood condition, Interior Secretary Bruce Babbitt proved to be an invaluable ally. Secretary Babbitt lives near the C&O Canal in Washington, DC, and he took great personal interest in formulating an effective response to flood damage along the Potomac River. Within a week of the flood, he visited Harpers Ferry as part of a tour up the Potomac to assess damage to the C&O Canal. On April 17, he returned to Harpers Ferry once again as the starting point for his 61-mile walk into Washington, DC along the C&O Canal. Both of these visits, along with assistance from Senator Robert Byrd and Congressman Bob Wise, attracted attention to the damage sustained in Harpers Ferry NHP. The efforts of these prominent individuals helped the National Park Service to secure an emergency appropriation from Congress that would assist with flood recovery efforts in parks along the Potomac and in the Pacific Northwest.

The aftermath of the flood presented the park with other dilemmas. For example, how could the flood be effectively interpreted to the public? In a sense, the success of our clean-up efforts hampered our ability to interpret the flood to park visitors. We managed to clean-up so quickly that much of the most visible evidence of the flood had been eliminated within a few days after the water retreated. Clearly something had to be done to capitalize on the public's curiosity about the impact of the flood. This need was even more imperative, given that floods comprise an important aspect of one of the park's six primary interpretive themes: environment.

In our efforts to interpret the impact of the flood, we received immeasurable assistance from our National Park Service neighbors at Harpers Ferry Center (HFC). At the request of the superintendent, Michael Paskowsky used the resources of HFC to develop an outstanding flood video that was then provided to the park's congressional delegation. This flood video was later supplemented by other film footage taken by HFC personnel and used as the cornerstone of the park's flood exhibit. The decision was made to locate this temporary exhibit in the entryway to the park's John Brown Museum which had sustained serious damage during the flood. Visitors could watch the flood exhibit, view the high water mark demarcated on the museum wall, read about the damage in newspaper stories incorporated into exhibit panels, and actually see the peeling paint and warped floors remaining in the wake of the flood. To partner



Left: View of Shenandoah Street during the 1924 flood.Right: Street scene from 1942 flood;photo by Edwin A. Fitzpatrick, courtesy Harpers Ferry NHP.

with the public, we also placed the park's donation box in this temporary exhibit. This entire exhibit cost the park only about \$200, but did a great deal to educate visitors about the ongoing role that floods play in Harpers Ferry history.

On a variety of levels, all natural disasters serve as learning experiences. Some of the lessons learned are both harsh and tragic. Other lessons, however, are more positive. Having experienced a flood in 1996, Harpers Ferry National Historical Park will be better prepared to deal with future floods. The park will update its flood plan and take other steps to incorporate what we have learned into our standard operating procedures. Although I do not relish another bout with rising water, I feel confident that the park will always deal more effectively with the next flood than we did with the last.

My final point would be to briefly compare the way that the National Park Service responds



to fires and floods. The Service has an important, and very necessary, wildfire suppression program. To my knowledge, no similar program exists for dealing with floods. Though several months remain before this year ends, 1996 has already demonstrated the enormity of Servicewide flood hazards with over 50 million dollars of water damage sustained by national parks in the East and the Pacific Northwest. Damage of this magnitude seems to call for an extensive training program designed to address the many flood dangers encountered throughout the national park system. After a year like this one, I would venture a guess that there would be no shortage of interest in such a training activity.

Bruce Noble is Chief, Interpretation & Cultural Resources Management, Harpers Ferry National Historical Park.

Minié Bullet Drawings from Harpers Ferry Armory Debut on WWW

An exhibit of rare and finely detailed drawings from the Harpers Ferry Armory has made its debut on the World Wide Web. The "Burton Collection Online Exhibit" is named for James H. Burton, who served as foreman, Assistant Master Armorer, and Master Armorer at Harpers Ferry between 1842–1854. Burton's signature appears on several drawings in the collection. Burton later served as superintendent of the Richmond Armory, where his complete familiarity with the machinery for manufacturing United States firearms proved indispensable for the Confederacy.

The Burton drawings were discovered in 1984 in a basement crawl space in Winchester, Virginia. The draw-

ings were subsequently purchased by the Harpers Ferry Historical Association, who donated them to the museum collection of Harpers Ferry National Historical Park. In addition to drawings detailing the evolution of the minié bullet, the collection contains illustrations of armory buildings, furnaces, lock mechanisms, machine tools, musket and rifle sights, rollers, and waterpower works.

The "Burton Collection Online Exhibit" is the result of a cooperative effort between Harpers Ferry National Historical Park, the Harpers Ferry Historical Association, and the Smithsonian Institution's Office of Printing & Photographic Services. The exhibit is located on the Harpers Ferry National Historical Park Home Page. The World Wide Web address is http://www.nps.gov/hafe.

For more information contact Marsha Starkey, Harpers Ferry National Historical Park <Marsha_Starkey@nps.gov> or Dave Gilbert, Harpers Ferry Historical Association <dgilbert@intrepid.net>.